IN THE CLAIMS

Please amend the claims as follows:

Claims 1-14 (Canceled).

Claim 15 (Currently Amended): A method for the diagnosis or detection of a prion disease within a subject suspected of suffering from such a disease ~~which comprises~~, the method comprising:

(i) contacting a sample from said subject with a peptide or a protein selected from the group consisting of Apolipoprotein B; a fragment of Apolipoprotein B ~~thereof~~; Apolipoprotein E; and a fragment of Apolipoprotein E ~~thereof~~;

(ii) contacting the ~~mixture~~ preparation obtained in step (i) with PrP^C or PrP^C containing mixtures; and

(iii) determining the presence and/or an amount of PrP^{Sc} in said sample.

Claim 16 (Currently Amended): A method of determining the presence of a marker that predisposes a subject to a prion disease, the method comprising:

(i) measuring a level of a protein ~~selected from~~ of Apolipoprotein B~~;~~ or a fragment thereof~~;~~ in said sample; and

(ii) correlating said level of protein obtained in said measuring step with the occurrence of ~~a~~ the prion disease.

Claim 17 (Currently Amended): ~~A~~ The method ~~according to any one of claims 15 to 16~~ of claim 15, wherein the prion disease is bovine spongiform encephalopathy (BSE).

Claim 18 (Currently Amended): ~~A~~ The method ~~according to any one of claims 15 to 16~~ of claim 15, wherein the prion disease is a Creutzfeld-Jacob disease.

Claim 19 (Currently Amended): A method for the detection of PrP^{Sc} within a sample, ~~which assay comprises~~ the method comprising:

(i) contacting said sample with a peptide or a protein selected from the group consisting of Apolipoprotein B; a fragment of Apolipoprotein B ~~thereof~~; Apolipoprotein E; and a fragment of Apolipoprotein E ~~thereof~~;

(ii) contacting the sample obtained in (i) with PrP^{C} or PrP^{C} containing mixtures; and

(iii) determining the presence and/or an amount of PrP^{Sc} in said sample.

Claim 20 (Currently Amended): A method for identifying, in a sample, a compound which modulates the transition of PrP^{C} into PrP^{Sc}, the method comprising:

(i) contacting said sample with a peptide or a protein selected from the group consisting of Apolipoprotein B; a fragment of Apolipoprotein B ~~thereof~~; Apolipoprotein E; and a fragment of Apolipoprotein E ~~thereof;~~ (a) in the presence of said modulatory compound and (b) in the absence of said compound;

(ii) contacting the ~~mixtures~~ preparation obtained in step (i) a and (i) b with PrP^{C} or PrP^{C} containing mixtures; and

(iii) determining the amount of PrP^{Sc} (a) in the presence of said modulatory compound and (b) in the absence of said modulatory compound.

Claim 21 (Currently Amended): ~~A~~ The method ~~according to any one of claims 15 to 20~~ of claim 15, wherein the peptide or the protein contains the sequence of SEQ ID NO: 3.

Claim 22 (Currently Amended): ~~A~~ The method ~~according to any one of claims 15 to 21~~ of claim 15, wherein the peptide or the protein ~~is of~~ has a molecular weight ~~selected~~ from 30 and 40 kDa and ~~which~~ has a sequence ~~is selected~~ obtained from fragments of Apolipoprotein B ~~taken~~ between positions 3201-3558, 3548-3905, 3201-3905, 3291-3558, 3548-3815, and 3291-3815.

Claims 23-26 (Canceled).

Claim 27 (Currently Amended): A diagnostic kit ~~for use in an assay according to claims 23 to 26~~ for the detection of PrP^{Sc} within a sample, the kit comprising:

a probe for receiving a sample; and

a peptide or a protein selected from Apolipoprotein B and a fragment thereof.

Claim 28 (Canceled).

Claim 29 (New): The method of claim 15, wherein the protein is Apolipoprotein B or a fragment thereof.

Claim 30 (New): The method of claim 15, wherein the peptide or the protein forms a complex with a LDL receptor.

Claim 31 (New): The method of claim 15, wherein the peptide or the protein contains the sequence of SEQ ID NO: 3.

Claim 32 (New): The method of claim 15, wherein the peptide or the protein has a molecular weight from 30 and 40 kDa and has a sequence obtained from fragments of Apolipoprotein B between positions 3201-3558, 3548-3905, 3201-3905, 3291-3558, 3548-3815, and 3291-3815.

Claim 33 (New): The method of claim 16, wherein the prion disease is selected from the group consisting of bovine spongiform encephalopathy (BSE) and a Creutzfeld-Jacob Disease (CJD).

Claim 34 (New): The method of claim 19, wherein the protein is Apolipoprotein B or a fragment thereof.

Claim 35 (New): The method of claim 19, wherein the peptide or the protein forms a complex with a LDL receptor.

Claim 36 (New): The method of claim 19, wherein the peptide or the protein contains the sequence of SEQ ID NO: 3.

Claim 37 (New): The method of claim 19, wherein the peptide or the protein has a molecular weight from 30 and 40 kDa and has a sequence obtained from fragments of Apolipoprotein B between positions 3201-3558, 3548-3905, 3201-3905, 3291-3558, 3548-3815, and 3291-3815.

Claim 38 (New): The method of claim 19, wherein the prion disease is selected from the group consisting of bovine spongiform encephalopathy (BSE) and a Creutzfeld-Jacob Disease (CJD).

Claim 39 (New): The method of claim 20, wherein the protein is Apolipoprotein B or a fragment thereof.

Claim 40 (New): The method of claim 20, wherein the peptide or the protein forms a complex with a LDL receptor.

Claim 41 (New): The method of claim 20, wherein the peptide or the protein contains the sequence of SEQ ID NO: 3.

Claim 42 (New): The method of claim 20, wherein the peptide or the protein has a molecular weight from 30 and 40 kDa and has a sequence obtained from fragments of Apolipoprotein B between positions 3201-3558, 3548-3905, 3201-3905, 3291-3558, 3548-3815, and 3291-3815.

Claim 43 (New): The method of claim 20, wherein the prion disease is selected from the group consisting of bovine spongiform encephalopathy (BSE) and a Creutzfeld-Jacob Disease (CJD).

Claim 44 (New): The method of claim 20, wherein determining the amount of PrP^{Sc} in the sample comprises performing a Protein Misfolding Cyclic Amplification (PMCA) assay.

Claim 45 (New): The method of claim 44, wherein the sample is a normal brain homogenate as a source of normal PrP^{C} and substrate.

Claim 46 (New): The method of claim 44, wherein the sample is lipid rafts from an infection-sensitive neuroblasma cell line N2a as a source of normal PrP^{C} and substrate.

Claim 47 (New): The method of claim 20, wherein the protein is Apolipoprotein B, determining the amount of PrP^{Sc} in the sample comprises performing a Protein Misfolding Cyclic Amplification (PMCA) assay, and the sample is lipid rafts from infection sensitive neuroblasma cell line N2a as a source of normal PrP^{C} and substrate.

Claim 48 (New): The method of claim 20, wherein said modulatory compound is an antagonist of Apolipoprotein B or a fragment thereof.

Claim 49 (New): The method of claim 20, wherein said modulatory compound is an antibody raised against Apolipoprotein B or a fragment thereof.

Claim 50 (New): The method of claim 20, wherein said modulatory compound is a LDL-receptor antagonist.

Claim 51 (New): A method for treatment of a prion disease, comprising:

administering a modulator of Apolipoprotein B or a fragment thereof to a subject in an amount sufficient to treat the prion disease.

Claim 52 (New): The method of claim 51, wherein the modulator is an antagonist of Apolipoprotein B or a fragment thereof.

Claim 53 (New): The method of claim 51, wherein the modulator is an antibody raised against Apolipoprotein B or a fragment thereof.

Claim 54 (New): The method of claim 52, wherein the antagonist is a peptide or a protein that contains the sequence of SEQ ID NO: 3.

Claim 55 (New): The method of claim 52, wherein the antagonist is a peptide or a protein that has a molecular weight from 30 and 40 kDa and has a sequence obtained from fragments of Apolipoprotein B between positions 3201-3558, 3548-3905, 3201-3905, 3291-3558, 3548-3815, and 3291-3815.

Claim 56 (New): The method of claim 51, wherein the modulator is an antagonist of a LDL-receptor.

Claim 57 (New): The method of claim 51, wherein the prion disease is selected from the group consisting of bovine spongiform encephalopathy (BSE) and a Creutzfeld-Jacob Disease (CJD).